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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/629,917	07/30/2003	Minoru Yonezawa	008312-0305295	6097

909 7590 08/10/2006

PILLSBURY WINTHROP SHAW PITTMAN, LLP  
P.O. BOX 10500  
MCLEAN, VA 22102

EXAMINER

PHAM, VAN T

ART UNIT PAPER NUMBER

2627

DATE MAILED: 08/10/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/629,917

Applicant(s)

YONEZAWA, MINORU

Examiner

VAN T. PHAM

Art Unit

2627

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 09 June 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) 11-17, 19 and 20 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10 and 18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 November 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

*Election/Restrictions*

1. Claims 11-17 and 19-20 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected Species, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 6/09/2006.

*Claim Rejections - 35 USC § 102*

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-7, 10, 18 are rejected under 35 U.S.C. 102(b) as being anticipated by Katayama (JP 08-077589).

Katayama, see abstract and Figs 1-14 and 22, 24, 30. , discloses an optical disk device, comprising: an optical head which emits a laser beam to an optical disk and receives a reflection light by using an objective lens, thereby carrying out one of a recording process and a reproduction process (see Figs. 21-24 and [0014]-[0019]); a position control portion which carries out position control of at least one of the optical head and the objective lens by a compensation gain based on a detection signal from the optical head (see Figs. 1-14 and abstract, [0018], [0077]); and a disturbance learning portion which adjusts the compensation gain of the position control portion, detects disturbance information of the optical disk by using the optical head to store it as learning disturbance information (see Figs. 1-14).

Regarding claim 2, see rejection above of claim 1.

Regarding claim 3, see rejection above of claim 1.

Regarding claim 4, see rejection above of claim 1.

Regarding claim 5, see Figs. 1-14 and abstract, discloses an optical disk device according to claim 1, wherein the disturbance learning portion reduces the compensation gain in a stepwise manner in a range in which position control of at least one of the optical head of the control portion and the objective lens operates, and detects and stores disturbance information of the optical disk by using the optical head.

Regarding claim 6, see Figs. 1-14 and abstract, discloses an optical disk device according to claim 1, further comprising a phase adjuster which adjusts a phase of the compensation gain according to a degree of reduction when the disturbance learning portion reduces the compensation gain of the position control portion (see [0011], [0083], [0086], [0096], [0099], and [0122]).

Regarding claim 7, see Figs. 1-14 and abstract, discloses an optical disk device according to claim 1, wherein the disturbance learning portion carries out learning of the disturbance when the optical disk device does not carry out a recording process and a reproduction process (inherently).

Regarding claim 10, see Figs. 1-14, discloses an optical disk device according to claim 1, wherein the disturbance learning portion also stores the disturbance information of the optical disk in an area corresponding to a predetermined rotation number of the disturbance information.

Regarding claim 18, see rejection above of claim 1.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 8-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Katayama (JP 08-077589) in view of Ishibashi (JP 11-086309).

Regarding claims 8-9, Katayama, discloses an optical disk device according to claim 1, wherein the disturbance learning portion stores the disturbance information (see rejection of claim 1). However, Katayama does not disclose disturbance learning portion stores the disturbance information according to a timing of an output from an encoder coaxial to a spindle motor which rotates the optical disk at a predetermined rotation number.

Ishibashi, see Fig. 1, discloses disturbance learning portion stores the disturbance information according to a timing of an output from an encoder coaxial to a spindle motor which rotates the optical disk at a predetermined rotation number.

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to provide an encoder coaxial to a spindle motor (therefore, the combination of Katayama and Ishibashi, discloses the disturbance learning portion has a detector for detecting rotation information based on a signal output from the optical head, and carries out learning of the disturbance information at a timing given by this rotation information (see Ishibashi, Fig. 1 and [0010], [0023], [0029]) in Katayama as suggested by Ishibashi, the motivation being in order to detect rotation of a motor (see Ishibashi [0029]).

#### *Cited References*

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

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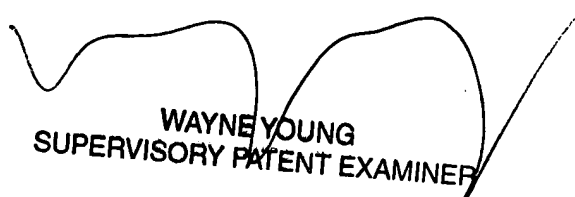
The cited references relate to optical disk drive including a position and means for compensating for an eccentricity of an optical disk (Hirai US 6,768,705); optical apparatus tracking error compensation (Miyagawa et al. 5,475,662); Signal processing method and signal processing apparatus (Masui et al. US 2002/0196717).

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to VAN T. PHAM whose telephone number 571-272-7590. The examiner can normally be reached on Monday-Thursday from 9:00am-6:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wayne Young can be reached on 571-272-7582. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

VP

  
WAYNE YOUNG  
SUPERVISORY PATENT EXAMINER